REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Status of Claims:

No claims are currently being canceled.

Claims 1-11 are currently being amended.

Claims 12-14 are currently being added.

This amendment amends and adds claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claims remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-14 are now pending in this application.

Claim Rejections – Prior Art:

In the Office Action, claims 1-11 were rejected under 35 U.S.C. 102(b), as being anticipated by U.S. Patent No. 5,724,444 to Yamanishi. This rejection is traversed with respect to the presently pending claims under rejection, for at least the reasons given below.

Yamanishi relates to an apparatus similar to that recited in the "Background of the invention" of the present application. As disclosed in the description from page 2, line 18 to page 3, line 6 of the specification of the present application, a reference value for range correction is sequentially changed on the basis of histograms updated each time for reading one image line from a scanner. Therefore, the reference value for range correction continuously varies during reading throughout one document image. Consequently, even in a case of characters or photographs with the same density in one document, the reference value for range correction varies according to the status of the document image around the characters or photographs, and it is difficult to achieve uniform density reproduction in a document image.

Now, a brief explanation of the present invention will be provided, with reference to Figure 6 of the drawings. In step S11 of FIG. 6, there is set a number M of image lines for

calculation for calculating the reference values for range correction. Then, in steps S13 to S15, a histogram is created on the basis of image data corresponding to the number M of the image lines for calculation. Then, in step S16, reference values for range correction (density correction) are calculated based on the histogram. The setting of the number M of image lines for calculation in step S11 is explained, as step S2 shown in Figure 5, on page 15, line 24 to page 16, line 15 of the specification.

The above reference values for range correction do not vary in the present invention. Specifically, as shown in steps S17 and S18, the same reference values for range correction are applied to all the image data in one document. Therefore, the density of the image copied on paper is uniform. It is thus possible to perform density correction for documents having various densities by using appropriate range correction reference values. The processing "process image using reference values" performed by the range correction section 103 in step S18 is explained on page 19, lines 4-12 of the specification.

As described above, the present invention can achieve uniform density reproduction throughout a document image, and thus is different in structure and purpose from Yamanishi.

In order to more clearly distinguish over Yamanishi, claim 1 has been amended to recite "a setting section which sets the number of image lines for calculation used for calculation of reference values for density correction", as shown for example in step S11. A histogram is created on the basis of image data corresponding to the number of image lines set by the setting section. The correction reference value calculating section calculates a set of correction reference values (densities D_W and D_B) on the basis of the created histogram (step S16). By using the correction reference values, the pixel density correcting section performs correction of the pixel density with the same correction reference values for all the read image data (step S18).

As explained above, Yamanishi does not disclose, teach or suggest the features recited in presently pending independent claims 1, 6 and 10 (claims 6 and 10 have been amended in a similar manner as claim 1).

Claims 2-5, 7-9 and 11 have been amended in conformity with the amendments made to the independent claims. Also, claims 1, 3, 4, 5, 8 and 9 have been amended to remove the means plus function language from those claims.

New Claims 12-14:

New claims 12-14 have been added to recite additional features of the present invention that are believed to provide an additional basis for patentability of these claims over the cited art of record.

Conclusion:

Since all of the issues raised in the Office Action have been addressed in this Amendment and Reply, Applicant believes that the present application is now in condition for allowance, and an early indication of allowance is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date ___March 25, 2005___   By ___Phillip J. Articola___

FOLEY & LARDNER LLP   Pavan K. Agarwal
Customer Number: 22428   Registration No. 40,888
Telephone: (202) 945-6162
Facsimile: (202) 672-5399   Phillip J. Articola
                                Registration No. 38,819